Docodon

Docodon (meaning 'beam tooth') was a mammaliaform from the Late Jurassic of western North America. It was the first docodontan Mesozoic cynodont to be named.

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Description

Docodon was the first docodontan cynodont found and named, and later gave its name to the family it now belongs to, the Docodonta.[3] Docodontans had more complex shaped teeth than other early non-mammalian mammaliaforms, with piercing and crushing surfaces that would have allowed members of this family to eat a wider range of food types. These complex teeth are more similar to later mammal groups, but evolved independently of them.

Unlike many of its coexisting mammal relatives from the Mesozoic, *Docodon* is known from a large number of teeth and jaws of differing growth stages. This has made it possible to study the growth of this docodontan, and has revealed how docodont jaws change from juvenile stages to adulthood.[4]

Discovery

Docodon was discovered and named by Othniel Charles Marsh in 1880.[1] Like many other early small mammaliaforms, it is known only mainly from fossilized teeth and jaws, as these are the hardest parts of the body and survive more easily in the fossil record. *Docodon* fossils are found most commonly in the Black Hills region of South Dakota.

Its height is estimated at 10 centimeters with an approximate weight of 30 grams, making it one of the larger mammaliaforms known from the Morrison Formation.[5]

Docodon

Temporal range: Upper Jurassic

Pre€ € O S D C P T J K PgN

Docodon striatus

Scientific classification

Kingdom:	Animalia
Phylum:	Chordata
Clade:	Therapsida
Clade:	Cynodontia
Family:	†Docodontidae
Genus:	†*Docodon* Marsh, 1881[1]

Species

- *D. victor* (Marsh, 1880)[1]
- *D. affinis* (Marsh, 1880)*
- *D. crassus* (Marsh, 1880)*
- *D. striatus* (Marsh, 1880)*
- *D. superus* (Simpson 1929)*
- *D. apoxys* (Rougler, Sheth, Carpenter, Appella-Guiscafre & Davis, 2014)[2]

**probable synonyms*

Species

A number of species have been erected, but most are now considered to represent *D. victor*, with differences being attributed to differing ages of the individuals represented.[6] However, *D. apoxys* is still considered a separate species from *D. victor* due to differing numbers of tooth roots.[4]

- *Docodon victor*[1]
- *Docodon apoxys*[2]

See also

- Morrison Formation
  - Mammals of the Morrison Formation

References

1. Marsh, O. C. (1880). "Notice on Jurassic mammals representing two new orders". *American Journal of Science*. **20** :235-239.
2. Rougier, G. W.; Sheth, A. S.; Carpenter, K.; Appella-Guiscafre, L. & Davis, B. M. (2014). "A new species of *Docodon* (Mammaliaformes: Docodonta) from the Upper Jurassic Morrison Formation and a reassessment of selected craniodental characters in basal mammaliaforms" (https://www.researchgate.net/publication/26489747). *Journal of Mammalian Evolution*. **22**: 1-16.
3. Kretzoi, M. (1946). "On Docodonta, a new order of Jurassic mammaliaforms". *Anneles Historico-Naturales Musei Nationalis Hungarici*. **39** :108-111.
4. Schultz, J. A.; Bhullar, B.-A. S. & Luo, Z.-X. (2018). "Re-examination of the Jurassic mammaliaform *Docodon victor* by computed tomography and occlusal functional analysis" (https://link.springer.com/article/10.1007%2Fs10914-017-9418-5). *Journal of Mammalian Evolution*. in press. {{doi|10.1007/s10914-017-9418-5))
5. Foster, J. R.; Trujillo, K. C.; Madsen, S. K. & Martin, J. E. (2006). "The Late Jurassic mammal Docodon, from the Morrison Formation of the Black Hills, Wyoming: implications for abundance and biogeography of the genus". *New Mexico Museum of Natural History and Science Bulletin*. **36**: 165–169.
6. Chure, D. J.; Litwin, R.; Hasiotis, S. T.; Evanoff, E. & Carpenter, K. (2006). "The fauna and flora of the Morrison Formation". In *Palaeontology and Geology of the Upper Jurassic Morrison Formation*. Foster, J. R & Lucas, S. G. R. M. (eds). *New Mexico Museum of Natural History and Science Bulletin* **36**.

External links

- Docodon (https://web.archive.org/web/20150710225411/http://dinosaurs.about.com/od/mesozoicmammals/p/docodon.htm)
- Docodon Library (http://www.britannica.com/EBchecked/topic/167344/Docodon)
- Mammal Genus (https://museumofwesternco.academia.edu/JohnFoster/Papers/163137/THE-LATE-JURASSIC-MAMMAL-DOCODON--FROM-THE-MORRISON-FORMATION-OF-THE-BLACK-HILLS--WYOMING--IMPLICATIONS-FOR-ABUNDANCE-AND-BIOGEOGRAPHY-OF-THE-GENUS)

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